# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

Acadia Insurance Company,	)	Civil Action No. 04-12557-WGY
as Subrogee of St. Paul Street, LLC	)	
Plaintiff	)	
	)	
v.	)	AFFIDAVIT OF
	)	DAVID C. COWEN
	)	
NER Construction Management, Inc.	)	
Defendant	-	

- I, David C. Cowen, being duly sworn, depose and state under the pains and penalties of perjury that the following statements are true and accurate to the best of my belief:
- I have reviewed the available material relative to the fire that occurred on January
  2005 at the 2 St. Paul Street Condominium Project being constructed by Suffolk
  Construction which is the subject of this lawsuit.
- 2. The Defendant, NER Construction Management, Inc (NER) requested that Robson Forensic determine the responsibilities of NER with regard to the fire and to materials at the site that are alleged to have been a factor in the fire.
- 3. I am qualified to give such an expert opinion because of my educational background and training, together with my actual hands on work experience. In addition, I have previously given expert testimony in Suffolk Superior Court and Hampden District Court as an expert in matters relating to construction. I have also testified in deposition

as expert for cases in the United States District Court, Boston, MA, and the Judicial Court of Waterbury (Connecticut). A true and accurate copy of my curriculum vitae is attached as Exhibit A.

- 4. I am a licensed architect in the Commonwealth of Massachusetts with background, training and experience in the administration of large construction projects. I have served as construction administrator on dozens of construction projects.
- 5. I have reviewed the following materials:
  - 1. Brookline Fire Department Emergency Response Report, 1/31/04.
  - State Fire Marshall Fire Incident Report.
  - 3. State Fire Marshall Fire Service Casualty Reports (2).
  - 4. NER Supervisor Incident/Accident Report, 2/2/04.
  - 5. Owner-Contractor Construction Agreement for St. Paul Residences Project between St Paul Street LLC (the Owner) and Suffolk Construction (the Contractor), 4/16/03.
  - 6. NER Materials Submittals, 9/4/03.
  - 7. Court Complaint.
  - 8. Affadavit of Mark Brown, 7/5/05.
  - 9. Affadavit of Mark Sullivan, CFEI, 8/3/05.
  - 10. 11 Photographs of Project Site and Fire Scene, 2/2/04.
  - 11. My interview of Mark Brown, NER Construction, 8/2/2005.
  - 12. Suffolk Construction Contact List, 7/29/05.

- 13. NER (M. Brown) letter to Suffolk Construction (Eric Clory), 2/7/04.
- 14. Suffolk Construction Daily Site Reports, 1/30/05 and 1/31/05.
- Suffolk Construction contracted with St. Paul Street LLC to construct an 6. apartment building at 2 St Paul St., Brookline, Massachusetts. Construction commenced on or about April of 2003. Any copy of the contract is attached hereto as Exhibit B.
- 7. Suffolk Construction was the General Contractor. The project was to be constructed in accordance with extensive specifications and drawings produced by Elkus/Manfredi Architects Ltd., Boston, Massachusetts.
- 8. Suffolk hired numerous subcontractors to perform various portions of the work. NER Construction Management Inc. (NER) was hired to perform certain waterproofing and sealant work on the project.
- 9. On January 30, 2005, NER was working on the project site, along with about 100 other workers from about a dozen companies. According to the Suffolk Daily Report, NER had four tradesmen on site, including a foreman. According to that same report, NER was continuing in their work to "cover the windows with poly on Elevation A" and apply the Air-Bloc 7 on Elevation G." Air-Bloc 7 is a trowel or spray applied air barrier membrane manufactured by Henry Company.

- 10. NER was also cutting waterproofing membrane material ("Blueskin") on a work table they had erected in the basement garage of the project building.
- 11. January 31, 2005 was a Saturday. The outside temperature was 16 degrees (F) at 6 am.
- 12. On January 31, 2005, NER had no employees working or present on the construction site. There were approximately 88 workers on site, from nine companies, including Suffolk Construction's Superintendant. Activities on January 31 included 8 laborers fueling and operating temporary heaters inside the building that had been ongoing through the previous night, 4 workers spraying fireproofing, 16 plumbers installing rough plumbing, 3 workers installing fire protection (sprinkler) system piping, 7 pipefitters installing HVAC piping, 18 electricians installing rough electric and switchgear, 28 workers installing interior partitions, including 12 carpenters installing metal stud framing and laborers performing "heavy cleaning."
- 13. On January 31, 2005, at approximately 8 am, a fire was discovered in the basement of the project building. Brookline Fire Department responded to the scene and extinguished the fire.
- 14. On Monday, February 2, 2005, NER was notified of the fire, and made investigation of the scene. Their investigation found trowel applied waterproofing materials present outside the building.

- 15. The only material of their work found in the area of the fire after the fire by NER's investigator was vapor barrier membrane. This material is Bakor Blueskin, which is identified in the manufacturer's product data as not a flammable material, with a flash point of 204 degrees Centigrade (399.2 degrees Fahrenheit) with an auto ignition temperature of 370-480 degrees Centigrade (698-896 d. F.). The manufacturer recommends the material be stored in an enclosed area not warmer than 49 degrees Centrigrade (120.2 degrees Fahrenheit).
- 16. The Plaintiffs have alleged that NER was responsible for the fire.
- 17. The Brookline Fire Department Incident Reponse Report and the State Fire Marshall report make no determination of the cause of the fire ignition.
- 18. The construction project site was under the control of Suffolk Construction. All subcontractors on the site were under the direction and authority of Suffolk, the general contractor.
- 19. All construction materials that NER was using in the course of its' work were those materials specified by the architect.
- 20. Product data sheets and material safety data sheets for materials to be used by NER had been submitted by NER to Suffolk Construction. Suffolk Construction

approved the materials, and was fully informed by these submittals as to the nature of the products, including their composition, combustion characteristics and the manufacturers' storage recommendations.

- 21. As General Contractor, Suffolk Construction had control of the site and directed NER when and where to install their work, portions of the site to be used for storage of construction materials and portions of the site available as work areas.
- 22. Suffolk Construction was responsible for job-site safety. With regard to safety of persons and property, the Agreement for the construction states:
  - 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards...

and

10.2.4 When use or storage of explosives or other hazardous materials or equipment or other unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

- 23. There is no evidence that NER left construction materials stored in a way that was hazardous or likely to cause a fire. NER's activity and storage was known and approved by Suffolk Construction.
- 24. The area used by NER to cut membrane material was not secured from use by others. NER had no control over the work area in the garage that Suffolk directed they use.
- 25. Other work being performed by Suffolk Construction's other subcontractors on the day of the fire is known to involve hot work and sparks. Installing metal studs frequently requires cutting the metal studs, causing sparking. Rough plumbing involves welding and soldering of joints which are known to be potential sources of fire ignition.
- 26. To the degree that any materials brought to the site by NER may have been hazardous, or combustible or flammable, Suffolk Construction took control of such materials when they were delivered to the site and was responsible to assure their proper care.
- 27. Within the bounds of reasonable architectural and technical certainty, and subject to change if additional information becomes available, it is my professional opinion that:

Signed under the pains and penalties of perjury this 24 day of August 2005.

David C. Cowen, A.I.A.

NER-All Cases

Affidavit of David C. Cowen

Signed under the pains and penalties of perjury this 2 day of August 2005.

David C. Cowen, A.I.A.

NER-All Cases

Affidavit of David C. Cowen



# DAVID C. COWEN, A.I.A. Architect

# AREAS OF EXPERTISE

Premises Liability: Analysis of Slips, Trips and Falls; Walkway Construction and Safety; Slip Resistance; Effectiveness of warnings; Illumination; Delineation of hazards

Parking lots; Stairs, Ramps, Corridors; Platforms and level changes; Snow and ice; Retail displays; Food services; Furniture; Electrical devices; Moving Equipment; Walk-off mats; Recreational devices and equipment; Pools and athletic surfaces; automatic doors

Building Codes and standards; Lighting; Glass and glazing; Handicapped accessibility; Children and elderly; Security

Design and Planning: Land development; Facility planning; Zoning; Building codes & standards; Accessibility.

Building Failures: Cracking/Settling/Collapse; Water intrusion; Fire/Smoke damage; Fungal growth; Insect damage; Roof/Wall failures; Fires, Acoustics

Operations and Maintenance: Wet floors; Warnings; Sweep logs; Floor finishes and application, Landscaping; Building repairs; Preventative Maintenance; Snow & Ice Control; Inspections, Standards

Building Systems: Plumbing/Supply/Waste; Sprinklers; Alarms; Lighting; MEP equipment & controls; Interior air quality; Wood/coal stoves; Chimneys & flucs.

Architectural Practice: Standard of Care, Contracts, Records, Planning, Inspections, Construction supervision and observation, Punch lists, Approvals

Construction Safety: Safety practices, procedures and record keeping, incidents on building construction sites including falls from roofs, steel framing, unprotected openings, and injuries from unsafe working conditions.

12/08/04



# DAVID C. COWEN, A.I.A. Architect

#### PROFESSIONAL EXPERIENCE

2003 to	Robson	Forensic, Inc.

present Associate

Provide technical investigations, analysis, reports, and testimony towards the resolution of commercial and personal injury litigation involving planning and design and construction of buildings and failure analysis.

2000 to Office of M. Rosenfeld, Acton, Massachusetts (architects and planners)

2002 Senior Construction Administrator

Senior construction phase architect for firm specializing in educational, institutional and high end residential projects. Expertise in inspection of contractor work throughout construction to assure conformance with contract and quality of construction, management of all contract changes to the Work, knowledge of construction procedures and safety of workers and occupants during the construction.

1997 to David Perry Architects, Cambridge, Massachusetts (architects and planners)

2000 Senior Associate

Serviced a wide variety of project types including: college and university buildings, religious facilities, and affordable housing. Expertise in oversight and management of construction contract documents and construction phase activities.

1995 to Northeastern University, Boston, Massachusetts

1997 Architect, Dept. of Physical Plant

On-site architect for new student recreation center building with retail services. Investigation, evaluation, and analysis of existing campus buildings.

1993 to Dinisco Associates Architects, Boston, Massachusetts (architects and planners)

1995 Project Manager

Building and safety code analysis, construction administation.

1990 to Kubitz Associates Architects, Wellesley, Massachusetts

1993 Project Manager

Expertise in commercial airline terminals and aviation facilities.

1983 to Drummey Rosane Anderson, Newton, Massachusetts(architects and interior designers)

1990 Associate, Project Manager

Expertise in commercial office parks and tenant fit-ups, secondary schools, and

laboratory and science facilities.



# DAVID C. COWEN, A.I.A. Architect

1982 to Kubitz Associates Architects, Wellesley, Massachusetts

1983 Site Inspector

Architects for aviation and mass transit facilities and institutional buildings. Daily inspections and documentation of reconstruction of condemned five year old athletic

facility.

1978 to Architectural Practices in Cincinnati, Ohio and Boston, Massachusetts

1983 Architectural Intern/Designer/Draftsman

Wide variety of project types including institutional and retail facilities.

# PROFESSIONAL CREDENTIALS

Registered Architect: Commonwealth of Massachusetts

# EDUCATION

Bachelor of Arts, Gannett Scholar, Carleton College, Northfield, Minnesota, 1975

Professional degree work/study program 1977-81, Dept. of Architecture, College of Design Art & Architecture, University of Cincinnati

# Training Courses:

Continuing education classes (i.e., construction safety, cavity wall construction, construction specifications) and over thirty seminars on topics including professional liability and insurances, construction contracts, and a wide variety of building products, such as window systems, skylights, door hardware, floor finishes, paint systems, and masonry.

OSHA #500 Construction Industry Outreach Trainer, 2003

#### PROFESSIONAL MEMBERSHIPS

American Institute of Architects

**Boston Society of Architects**